DOCUMENT RESUME

ED 202 573 PS 012 140

AUTHOR Simons, Jenny
TITLE Preschools and Montessori Preschools: A Discussion.
INSTITUTION Nursery School Teacher's Coll., Newtown (Australia).
REPORT NO ISBN-0-908494-01-7
PUB DATE 80
NOTE 41p.

EDRS PRICE MF01/PC02 Plus Postage.
DESCRIPTORS Comparative Analysis; Educational Methods; Educational Objectives; *Educational Practices; Educational Principles; Educational Research; Foreign Countries; *Preschool Curriculum; *Preschool Education; *Teacher Education; *Teacher Role
IDENTIFIERS *Australia; Montessori Method; *Montessori Preschools

ABSTRACT

A comparison of regular preschools and their teachers with Montessori preschools and their teachers is made in order to assess the advisability of introducing Montessori teacher education in an Australian teacher education institution. The comparison involves a discussion of general educational objectives, curriculum, teacher education, the role of the teacher in the classroom and other educational and management issues in both kinds of preschool. Also discussed are the place of the Montessori method in early childhood education today and the persistence of Montessori schools. It is concluded that, to the extent that present day Montessori schools adhere to the original Montessori educational objectives, methods and materials (to the neglect of recent advances in theories of child development, child discipline and teacher training) those schools must be inadequate learning environments for today's young children. It is further concluded that there is no place for a traditional Montessori teacher education program in Australia. Appended materials include statements of the Montessori method, principles and code of ethics; guidelines for teachers and visitors observing Montessori classrooms; a brief profile of one Montessori school; and an annotated bibliography of publications about Montessori education. (Author/RH)

**********
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
**********

ED202573

U.S. DEPARTMENT OF HEALTH,
EDUCATION & WELFARE
NATIONAL INSTITUTE OF
EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

# PRESCHOOLS AND MONTESSORI PRESCHOOLS:

# A DISCUSSION

JENNY SIMONS

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

J. Simons

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

PS012140

I wish to thank the Chairman, Mr G A Gray and the Council of the Nursery School Teachers' College for their support and encouragement to me in this examination of the Montessori method of education.

ISBN 0 908494 01 7

Printed and published at Nursery School Teachers' College, 1980
© NSTC

CONTENTS


| | Page |
|---|---|
| Introduction | 1 |
| Educational Objectives | 2 |
| Research in Educational Achievement | 4 |
| The School Curriculum | 6 |
| "Practical Life" Activities | 6 |
| Sensorial Materials | 6 |
| Mathematics | 7 |
| Language | 7 |
| Music | 8 |
| Science and Social Studies | 8 |
| Individual Instruction | 9 |
| The Use of the Outdoor Environment | 9 |
| Parental Involvement | 9 |
| "The Liberty of the Child" | 10 |
| "The Prepared Environment" | 10 |
| The Role of the Teacher | 11 |
| Teacher Education | 14 |
| The Place of the Montessori Method in Early Childhood Education Today | 16 |
| The Persistence of Montessori Schools | 17 |
| Montessori Teacher Education in Australia | 21 |
| References | 22 |
| Appendices I - X | 23 - 36 |

## APPENDICES


I The Montessori Method

II Some Montessori Principles

III Code of Ethics, American Montessori Society

IV A Decalogue by Maria Montessori

V Observation Guidelines

VI Profile of a Montessori School

VII Montessori for Toddlers

VIII Annotated Bibliography

IX List of Papers Collected

X Thanks

## INTRODUCTION

The revival of interest in Montessori education in the nineteen-sixties and seventies in the USA continues to flourish into the eighties. A revival of interest in Montessori education emerged in Australia in the late seventies. As there are no teacher education facilities for Montessori teachers in Australia, Australian Montessori schools must be staffed by teachers prepared overseas. The question arises: Should an Australian teacher education institution introduce Montessori teacher education?

The object of this paper is to help to answer this question by comparing Montessori preschools and their teachers with regular preschools. This will involve a discussion of the general educational objectives of both kinds of preschool, the school curriculum, teacher education, the role of the teacher in the classroom and certain other educational and management issues.

A visit to the west coast of the USA in November, 1980, enabled the writer to investigate Montessori education at first hand.

EDUCATIONAL OBJECTIVES

Both Montessori and regular preschools seek to maximize young children's learning potential by laying the foundations for subsequent learning and social adjustment. They differ in the emphasis they give to the importance of various aspects of social, emotional, cognitive, physical and moral/ethical/religious development. Montessori, following Itard and Seguin, developed her educational theories by working first in the area of Special Education. She demonstrated that, by good teaching, so-called idiot children could learn to read and write. She then went on to demonstrate through the "Children's House" which she established in a slum area in Rome, that good teaching could produce literacy and numeracy in young disadvantaged children. She used three specific educational strategies to assist her pupils' learning achievement.

The first was by the use of Seguin's structured material. Expanding and developing with great insight and intelligence upon the work of Seguin and Itard, she devised didactic apparatus that was intrinsically motivating to young children, graded, and in many cases self-correcting. She recognized that a great deal of sensory experience with concrete materials was a necessary prerequisite to later academic learning. This method of assisting the child's learning has been fully accepted and incorporated in regular preschool practice.

The second way in which she achieved literacy and numeracy in disadvantaged children was by introducing them to a literate and numerate environment. The mathematical and language based activities which were presented to the children had many of the characteristics of the activities used by teachers today.

Her third strategy was to individualize instruction. Montessori was a brilliant, analytical teacher, and an acute observer of young children. She was one of the foremothers of the study of child development; today preschool teachers use many of her insights and precepts (such as observing the child closely before deciding on suitable intervention strategies) without remembering or acknowledging her profound contribution. Regular preschool teachers plan individually for children on the basis of observation and a knowledge of child development.

Montessori stressed the liberty of the child in the learning environment. In this she was a great innovator, as Italian schools, indeed all schools, at the turn of the century were formal, authoritarian and prescriptive. Montessori offered to the child the opportunity to select the learning tasks to be pursued, within the limits of the materials available in the classroom. This was a great innovation and has been fully accepted and incorporated in regular preschool practice today. Today a preschool child selects his/her activity for the greater part of the time.

Montessori believed that education should develop in children the personal characteristics of self-discipline, persistence, respect for the rights of others, self-confidence and morality. It is probably true to say that most of these outcomes would be sought by regular preschool teachers, and indeed by most teachers.

Educational objectives which are considered important today but which were not stressed by Montessori are physical development, social development and creativity. She did not ignore these objectives, but gave them a lower priority. By allowing children to move about freely within the classroom, Montessori offered more opportunity for physical activity than did the schools of her day; and so she believed that physical development was reasonably well catered for. She also advocated a daily period of gymnastics. It may be conjectured that she would approve of the playground apparatus that is provided today to stimulate gross motor activity and to help develop gross motor skills. Montessori arranged for lines to be painted on the floor of the classroom so that children could practise balanced walking - as on a tightrope - without the danger of falling off; and recommended a "gate" frame that children could hang from, to strengthen their arms. She said this frame could be positioned unobtrusively in the garden (Montessori, 1914).

Similarly, some social development could occur more easily in a Montessori school than in an Italian school of the 1900's simply because children were free to move about and to interact in the course of the school day. Nowadays, the regular preschool makes explicit provision for social development, by drawing children's attention to the need for care and consideration in social relationships and by modelling and commenting upon appropriate social behaviour.

Creativity, as expressed through fantasy and fairy tales, dramatic play, creative dance and drama had little place in Montessori schools. A contemporary Montessori educator comments, "Montessori realized that a reality-bound school situation may prove more beneficial to the child in order to release his creative forces at a time when he is incapable of distinguishing fact from fantasy" (Rambusch, 1962, p 93).

Montessori realized that the aspect of fantasy that is represented in fairy tales was inappropriate for very young children, and most modern educators would agree with her. However, she failed to observe the learning potential that exists for a child in dramatic play when s/he takes other roles or uses objects symbolically (as in block play).

In short, the regular preschool has assimilated and incorporated many of the revolutionary educational goals of Montessori, and with the increased understanding of the way children learn that has followed from the study of child development, has added further educational goals.

To the extent that present day Montessori schools adhere to the original Montessori educational objectives, they must be inadequate learning environments for today's young children. This conclusion is elaborated in a discussion of the curriculum of Montessori and regular preschools.

RESEARCH IN EDUCATIONAL ACHIEVEMENT

Research comparing Montessori preschool education with regular preschool and kindergarten grade education for middle-class and economically disadvantaged children was surveyed by Miezitis (1971) and McGrath (1980). In a summary of five studies with middle-class children, Miezitis found that the majority of comparisons revealed no significant differences. There were no significant differences between Montessori and other preschool and kindergarten grade programs on measures of ability (ITPA) and Piagetian conservation tasks. Preschool children in a structured cognitive program (Bereiter-Engelman) were superior to Montessori children on measures of arithmetic, reading and spelling.

On sociomotivational and cognitive-style measures there were few significant differences between Montessori and non-Montessori groups. However, Montessori groups showed significant differences on measures of task persistence, reflective cognitive tempo and self-reliance. A regular preschool group was superior on measures of non-verbal creativity, and in the depiction of people (rather than geometric figures) in a free drawing task. Miezitis suggests that for these middle-class groups the similarities in home environment may be more influential than any differences in schooling (p 50).

In a summary of research with disadvantaged children, Miezitis found that on cognitive ability and achievement measures, Montessori preschool groups showed (i) greater gains than control groups without preschool education; (ii) non-significant gains in comparison with regular preschool groups; and (iii) lower gains in comparison with structured cognitive-oriented preschool programs of the Bereiter-Engelman type.

In sociomotivational and learner-style measures, Miezitis found that some results from four studies showed significantly higher scores for Montessori groups on such measures as attentiveness, intentional learning ability, efficiency in structured problem solving, motor impulse control, field independence, task persistence and test confidence. However, in a fifth study these differences were non-significant, or favoured non-Montessori groups.

In summary, Miezitis found that results from ten studies do not show strong differences in favour of Montessori groups. The clearest differences are found with disadvantaged groups of children in the cognitive area and appear to reflect classroom structure, a high degree of structure apparently promoting cognitive gain. However, when Montessori groups are compared with groups that are even more highly structured, children in these latter groups out-perform Montessori children (p 56).

In studies surveyed by McGrath, Montessori children were shown to spend more of their free time in social interaction, but had a lower rate of child/adult interaction than other children (Reuter and Yunik; Murphy and Goldner); experienced more variety of activity per day than children in other preschool programs (Berk); when tested in grade 3, showed cognitive gains in direct proportion to the number of years spent in Montessori education (Sciarra and Doisey); were significantly more advanced in

their acquisition of seriation and classification skills, but not in conservation skills (White, Yussen and Docherty). The last-mentioned experimenters also found that "Montessori children who had only been at the school for six months tended to perform as well as children who had been there for eighteen months, suggesting perhaps that the law of diminishing returns is applicable to time spent in acquiring these skills" (McGrath, p 23). McGrath also cites a longitudinal study (Miller and Dyer) in which, at the end of second grade, children who had had a Montessori preschool education were superior to three other groups of children in over-all achievement, curiosity, ambition ratings by teachers, reading and mathematics achievement, divergent thinking, achievement motivation and confidence. McGrath cites studies which show that children's creativity is not inhibited by Montessori education (Brophy and Choquette; Miller and Dyer).

In summary, studies are relatively inconclusive in many cases, contradictory in others. For example Sciarra and Dorsey showed cognitive gains in direct proportion to the number of years spent in a Montessori program whereas White, Yussen and Docherty found that children tested after six months of Montessori education tended to perform as well as children tested after eighteen months on certain cognitive tasks.

Few of the experimenters appear to have taken account of the amount of time spent by Montessori subjects on specific Montessori activities. Miezitis cites a study by Starr and Banta in which Montessori pupils were measured on the amount of time they were engaged in using didactic materials. A wide variation was observed. They reported that individual children spent from 1% to 21% of the available school day with didactic materials (overall average 12%). Two classrooms were observed, a highly structured one where 10% to 21% of the time was spent with didactic materials, and a relatively unstructured one where 1% to 7% of the time was spent with didactic materials. In the structured class, 90% of the didactic activity was self-initiated by the pupil and unaided by the teacher, whereas in the unstructured class only 56% of the didactic activity fell into that class (Miezitis p 46). Clearly in studying the effect of the Montessori school on groups of children, it would be necessary to measure the amount of time working with didactic materials, as well as the amount of time engaged in "practical life" activities and in teacher-initiated and controlled group work. Starr and Banta's work does suggest that "the Montessori Method" may be experienced more vividly by some children than by others.

A wide amount of variation was also noted by the present author when visiting Montessori schools.

Another unexamined variable is the training and experience of the teacher. This may be a most important variable since some teachers have taken only a few weeks' summer training followed by an internship.

## THE SCHOOL CURRICULUM

In a present day Montessori preschool, the curriculum seems to contain the following elements: "practical life" activities, sensorial material, mathematics, language, music, social studies and science. These elements will be discussed in turn, and compared with such elements in a regular preschool curriculum and in the curriculum followed in the original Montessori preschools. Also in this section, elements of the regular modern preschool curriculum which occur neither in modern nor original Montessori preschools, will be described and discussed

### "Practical life" activities

These are activities offered to the child in order to increase his or her competence in the business of daily life. "Practical life" activities include sweeping, mopping, dusting, cleaning mirrors, polishing furniture or metal objects, pouring, spooning, measuring, buttoning, lacing, tying bows, caring for plants and animals. Montessori teachers apparently feel free to devise additional "practical life" activities. Accordingly, children may be seen engaged in such activities as: transferring liquid from one container to another by means of a small sponge or by means of an eyedropper; transferring objects from one container to another by means of tweezers (dried beans) or by sugar tongs (marbles). Such activities as these clearly do not occur in daily life and any intrinsic value in such activities would be by way of fine motor skill development. The regular preschool classroom and the Montessori classroom both offer ample opportunity for fine motor development and it is suggestive of a conceptual woolliness that such activities are presented in Montessori preschools under the guise of "practical life' activities.

In regular preschools a wide variety of "practical life" activities are available to children: they are usually undertaken by children as and when the actual need arises - sweeping the classroom floor at the end of a session, sweeping the surrounds of the sandpit, mopping up a spilled bucket of water or a paint-splashed floor, dusting the play-house, wiping down the rungs of the climbing frame, picking up the play activities at the end of a session, rolling up and laying out mats. Buttoning and bow tying are encouraged in the context of putting on and taking off clothes.

In the original Montessori schools, children performed all the necessary housekeeping tasks - sweeping, dusting, tidying, setting tables for meals, waiting at tables, clearing away afterwards. The modern Montessori preschool has attenuated these functions: the child is offered a toy broom to push around the floor, while the teacher does the real sweeping up at the end of a session. This directly contradicts Montessori's intention that the child should become truly independent and competent, at an early age, in housekeeping and in personal management skills.

### Sensorial materials

Examples of Montessori sensorial materials are baric tablets, broad stair, colour boxes, pink tower, rough and smooth tablets, smelling bottles, sound boxes, thermic bottles. In a regular preschool, these materials would be categorized as discrimination aids - visual, auditory, haptic, tactile, olfactory. All of these types of materials, as developed by Montessori, would be found in a regular preschool classroom today.

In addition, variations, elaborations and extensions of these exercises in discrimination (often teacher-made) would be found in regular preschools and in some Montessori preschools. In the more "traditional" Montessori preschools, no additional sensorial materials would be provided. A Montessori teacher educator said to the author, "the school room should not look like a supermarket".

The regular preschool teacher feels it incumbent upon her/him to purchase or to make discrimination materials that respond to pupils' interests and levels of understanding, and which present the concepts in novel and attractive ways which will lead the child to interact with the materials. Montessori planned her materials to be attractive to children, and thus intrinsically motivating; and she observed that this was the case. But the pupils at the first Montessori schools, in the slums of Milan in the early 1900's, and the children of today (when even the majority of households below the poverty line have television sets) are not comparable populations. In most Montessori schools the sensorial materials that are available seem somewhat neglected by children - presumably because they are not now intrinsically interesting, or are of limited interest to today's children.

Mathematics

Montessori was brilliantly inventive in the area of mathematical apparatus. A perusal of the catalogue of the major commercial supplier of Montessori equipment (Nienhuis Montessori) reveals a long list of items which are conceptually sound embodiments of mathematical principles in arithmetic, geometry and algebra. Montessori had an almost mystical belief in the ability of a piece of structured apparatus to transfer the mathematical concepts that it embodied to the mind of the child who worked with it.

The study of child development leads the modern preschool educator to believe that the origins of mathematical understanding lie in experience with concrete materials (starting with real-life objects) together with the use of language to describe, label, compare and contrast elements of the experience. The language aspect of mathematical development was not stressed by Montessori, nor is it stressed in the curriculum of today's Montessori schools.

A certain amount of labelling takes place (big - little, thick - thin, tall - short) but little real-life number use (eg. using cardinals and ordinals in sentences: who's third in this line? How many children do I need to carry these four baskets?)

Language

Montessori largely ruled out the use of language as the medium of instruction in favour of materials. The teacher is exhorted to silence whenever possible, and to using the fewest words that will serve on any particular occasion. Montessori was doubtless reacting to the classroom situation of her day, where the teacher talked and the children did not. She required her teachers to talk little and to permit the child to talk freely. To this extent, she did in fact introduce child language into the classroom, but the child's language development was not specifically encouraged and facilitated as it is in the modern regular preschool.

In respect of literacy education, Montessori was extremely innovative, creating materials which could assist the child to teach him/herself to read and write. Children also become facilitators for one another in the Montessori classroom when there is a mixed age group of pupils, (typically 3-6 years in the USA). Some Montessori type materials are used in the regular preschool, but form only a small part of the total set of literacy materials and facilities available to the modern preschool child: an abundance of cheap and attractive picture and story books, and a variety of audio-visual aids, including the presentation of written material on film, videotape, slide and film loop, or as an audiotape to accompany a story book. The Montessori literacy materials look unstimulating and limited to the modern early childhood educator.

Once children have made a start on learning to read, Montessori schools introduce grammar, sentence structure and formal composition along the lines laid down by Montessori. This part of the curriculum appears most inappropriate for schools of today where language teaching reflects a modern understanding of the principles of linguistics.

The regular preschool teacher accepts the view that mastery of one's language promotes cognitive growth and academic achievement and initiates activities which directly contribute to children's language development: the presentation of children's literature, the encouragement to children to verbalize their activities, the introduction of new vocabulary especially through social studies and mathematics, the encouragement of children to speak freely in classroom and playground, and by establishing the school as a "reading environment" where books are used and enjoyed daily.

Such a concentration on language is absent from a typical Montessori classroom. In most the use of books is not fostered and the collection tends to be small. Children are usually not read to daily.

Music

Beginning with sensorial exercises with the sound boxes, Montessori pupils then and now progress to using the bells designed by Montessori. A series of bells is to be paired, as a sensorial exercise, and then the tones and semitones learned, named and represented on staves with moveable notes. These exercises, combined with the unaccompanied singing of children's songs, seem to form the Montessori music syllabus for young children. The material is useful as far as it goes; but the regular preschool music curriculum offers a great deal more: the use of tuned and untuned percussion instruments, and an alliance of music and movement which assists the child to experience physically the elements of music such as rhythm, pitch, duration and timbre.

Science and social studies

Montessori developed simple didactic activities in these areas of the curriculum. Her topics seem developmentally inappropriate today and the presentation mechanical. The regular preschool teacher now has the advantage of modern media, and group mobility to assist her/him. These subjects can now be studied in situ as well as in the classroom. The Montessori reliance on maps and mapping, for the teaching of geography, for example, takes no account of a child's developmental understanding of the concept of "map" (which may be approached through block play).

## Individual instruction

Montessori individualized instruction for young children, a great innovation at that time. The individualized approach that she demonstrated has been fully accepted as one appropriate method for teaching young children. Small group instruction, and larger group instruction are also used in regular preschools, as appropriate. Learning in groups has definite social and language advantages, as well as being an economical use of teachers' time. Observation by the author in Montessori classrooms seems to show that unless a teacher has the assistance of a well trained aide or aides, s/he is unable to offer instruction to even half the children in a group in any session; so although children receive individual instruction, they do not receive it daily.

## The use of the outdoor environment

Since the Montessori Children's Houses apparently made little use of the outdoors as a teaching environment, modern Montessorians seem likewise to neglect its possibilities. The playground is used in the same way as in primary schools: a place to send the children for a "break" from the classroom.

By contrast, the regular preschool uses the playground as a second learning environment, finding it particularly suitable for large muscle development, the consolidation of gross motor skills, social co-operation and social play. In areas where the climate does not permit outdoor activities for part of the year, or where no outdoor area is available, the regular preschool establishes an "indoor gym" to encourage gross motor activity.

## Parental involvement

The regular preschool has always maintained a close working relationship with its children's parents. The following are some of the ways in which parents, teachers and children come more closely together. The most basic relationship is renewed daily as parents bring children to the centre and pick them up at the end of each session. Ideally the preschool teacher can spend a few moments with each parent each day, as the arrival and dismissal procedures do not take place within the confines of a timetable. Arrivals may take place over a half hour (or longer, in a day care centre). Children may be picked up in a leisurely fashion at the end of a session, and the teacher would be free to talk. (However, this is not always the case. A note at the door of the preschool classroom at the UCLA nursery classes attached to the University Elementary School states: "Parents please say good-bye to your child at the door." The Principal, Dr Madeline Hunter, claims that this is to protect the child's privacy. It is conceivable that such protection may be needed where parents are over-anxious about the academic achievement of their children).

Organized communication with parents may occur in many ways: through a newsletter, announcements on a notice board, notes sent home to parents, parent-teacher interviews, parent evenings.

Parents become involved in the preschool through fund-raising activities, assistance in classroom and playground, staying awhile to visit in the classroom, working on management committees. Regular preschools have usually recognized that the child is assisted in assimilating and accommodating the change from home to school when schools take the initiative in forging strong links with the home. In recent years, parents have been invited to

assist the teacher in the classroom if they have the time and interest, and many parent-assistants have been helped to understand their children better by seeing them in relation to other children and through the eyes of the teacher, a professional trained in child development.

Regular preschools are thus liable to have many adults in the classrooms and playgrounds, and children are encouraged to use them as resources. Montessori preschools, by contrast, allow parents and other adults into the classroom by appointment only, never more than two at a time, and for a period of 30 - 45 minutes' observation only. The observer is placed on a low chair in an out-of-the-way corner, and is prohibited from moving, from making eye contact with the children or from interacting with the staff.

Montessori teachers believe that these extraneous adults are an intrusion into the child's working environment. (Overheard at a Montessori school: Parent: "I would like an appointment to visit my child's class: Director: "Right. I have a vacancy for mid January, or for the end of February." This episode took place in mid November).

"The liberty of the child"

Montessori claimed that her method was to be implemented while preserving the liberty of the child. As has been mentioned, a child in an original Montessori school had far greater liberty than his/her contemporaries in Italian schools of the day. However, by incorporating the spirit of Montessori in their thinking, and adding the views of other great educational innovators such as Pestalozzi, Froebel, Dewey, Macmillan and many more recent theorists and practitioners, modern preschools have developed to the point where their pupils are far freer than pupils in a Montessori preschool.

"The prepared environment"

Modern Montessorians claim that an important feature of their system is that children work within a "prepared environment". There seems to be some suggestion that children in other systems do not. This is patently untrue, as every classroom, ipso facto, is a prepared environment. "A classroom should not look like a supermarket" a teacher educator informed the author. It is true that no Montessori classroom looks like a supermarket. But there are some features of a supermarket that, even before supermarkets were invented, Montessori educators were using for educational ends: a variety of choice, orderly presentation of like materials, attractiveness in display, enticement.

The regular preschool teacher uses the same principles to create a "prepared environment". The difference arises because the Montessori teacher is limited in the number of new materials s/he may introduce. The regular preschool teacher is not. As a result, the Montessori pupil enters a supermarket where the shelves are rather bare, physically and conceptually. The regular preschool pupil's supermarket is more fully stocked, offers a wider choice to the customer, and has a stock that changes in response to customer needs.

THE ROLE OF THE TEACHER

It is the teacher's role which sharply differentiates a Montessori from a regular preschool teacher. The modern Montessori teacher is enjoined to prepare the didactic environment (both as to the teaching materials and as to the aesthetic appearance) before the child enters it, and then to step back and leave the child to interact with the environment. As the teacher's role is now practised, s/he intervenes only (a) on academic grounds, if a child seeks assistance, or if s/he deems that a child or group needs an introductory or continuation lesson in any area of the curriculum (whether the child or group has solicited the lesson or not); or (b) if a child is interfering with another child, misusing material, or being destructive towards material. The Montessori teacher therefore, does not engage in such regular preschool behaviours as: making friendly overtures to any child within the classroom; engaging in conversation that is not directly related to work in hand; commenting on the child's work by way of praise or encouragement; assisting a child to find a suitable occupation; taking up a position in the classroom with a particular activity, in order to stimulate children's interest in it; joining in any ongoing activities in order to assist children to achieve their objectives more fully (eg. - showing children a new way to join materials together, as they construct with waste materials); entering a children's conversation, or initiating one in order to introduce appropriate vocabulary or concepts; modelling techniques such as new ways to do finger painting; assisting a child to enter an on-going social situation; initiating an activity that adds an extra dimension to an on-going activity such as a chant or song to accompany children's actions.

This range of activities may occur during any work session in a regular preschool. The teacher acts, in short, to enrich the educational climate and environment. It is hard to believe that Montessori would have forbidden these activities out of hand since most of them maintain the child as the controller of his/her own learning. She spoke often of the teacher's need to observe the child closely before making any intervention. Given the educational climate of her day, it is not surprising that she did not develop her thinking along the lines of a wider variety of intervention strategies.

Montessori's injunction to the teacher to stand back was generated in response to the current dominating teacher behaviour - where the teacher did the talking and the children listened. Montessori was an innovative educator when she demonstrated that there were other ways of teaching than being the focal point in the classroom. Regular preschool teachers have accepted this teaching style; modern Montessori teachers have accepted Montessori's ideas but have codified them to the point of limiting themselves to interacting with children within a narrow range of possibilities.

Similarly, on the question of discipline of the child, modern Montessorians have codified and limited a Montessori suggestion about the usefulness of isolating the wrong doer and have ended up with a punishment that is harsh and alienating to the child.

Montessori (1914) wrote in respect of the disciplining of a child who disturbed others: "...we placed one of the little tables in a corner of the room, and in this way isolated the child, having him sit in a comfortable little armchair, so placed that he might see his companions at work, and giving him those games and toys to which he was most attracted. This isolation almost always succeeded in calming the child...The isolated child was always made the object of special care, almost as if he were ill." (p 103)

Note that this treatment was meted out to children who disturbed others; today it is not so confined in its usage. The isolated child is required to be ignored by all, which must cause distress to classmates when, as the author has observed, the isolated one sits sobbing loudly. Note also Montessori's mention of "toys". There are no "toys" in the Montessori classroom of today for anybody's consolation.

The regular preschool teacher's approach to discipline would be by verbal means, perhaps explaining, conciliating, helping children to negotiate frictions; or by direct verbal prohibition if need be; or by physically restraining a child in an emergency. S/he would be expected to think quickly before acting and to choose the most useful intervention to fit the situation. The Montessori teacher, by contrast, seems to stand aloof and then swoop on the offender to carry him/her off to the isolation chair. Thus valuable learning experiences for children are lost. Force and authority are used instead of words and reason, giving the child no opportunity to evaluate his/her behaviour and perhaps ameliorate it.

Again and again Montessori exhorts the teacher to be an observer of children, as she was, with the clear implication that the teacher's observation would be followed by decision making. However, lacking modern observational techniques, the Montessori teacher can but observe that disciplinary action is required, and make it along the lines described above.

Another aspect of the Montessori teacher's role is to act as guardian of the environment. The teacher should therefore keep an eye on all children so that they do not walk away from an activity before tidying up their work-place and returning the activity to its rightful place. A regular preschool teacher encourages rather than requires this sort of behaviour when an individual activity is selected; but many activities in the regular preschool are for use by groups, and the clearing up is undertaken by the group, or by other children, at the end of a work period. The teacher sees this activity as a useful lesson in co-operation.

Montessori teachers tend to take their responsibility for the environment to excessive lengths when they walk about the room straightening mats, trays, and laid out materials that children are currently working on. The modelling of this almost obsessive behaviour to children causes children to tend to act in the same way. The author has observed children pausing in their work to adjust a mat or a paper by a fraction of an inch. One 4 year old child, at a snack table, spread a paper napkin, lined it up squarely with the edge of the desk, broke a biscuit into regular pieces, laid them one by one in a row along the centre of the mat, then ate them in order, from left to right. When he had finished eating he folded the napkin in, corner by corner, containing all the crumbs neatly, and deposited it in the bin.

For the Montessori teacher, the role of demonstrator is an important one. She/he is to demonstrate to the child, either at the child's request or on the teacher's initiative, the way in which the classroom material is to be used. During training, the teacher will have compiled "albums", or notebooks, usually handwritten, often illustrated, on the exact method to be used in introducing each piece of material to the child. The quality of the teacher's presentation is one criterion by which the Montessori teacher is judged. The presentation includes modelling of the correct way to lay out the material as well as the ideal sequence of actions to be taken in using the material. When the teacher withdraws, the child is theoretically free to operate upon the materials in any way he/she chooses. The child's behaviour may pose a dilemma to the Montessori teacher (as to whether intervention is desirable) if the actions are too dissimilar to the ideal, or if the behaviour moves into fantasy play, if for example, a block from the pink tower set is used as a racing car to race in and out of the other blocks. In the latter case, the teacher would tend to intervene saying "You are not using these things properly. Please put them away on the shelf."

Such an episode brings into sharp focus basic differences in the role of the Montessori and the regular preschool teacher. The Montessori teacher is the custodian of the materials and a regulator of the behaviour that may occur when the child uses them. In this respect, the role is an inhibitory one. In the same situation a regular preschool teacher would have made no intervention; might have joined the child to encourage him/her to add language to the action, modelling as necessary ("Your car is going fast; you are avoiding collisions"); might have suggested that a bigger and better raceway could be constructed in the block corner; would have reflected that this child was able to use an object (a pink block) symbolically and could be helped in future with symbolic thinking. Thus the regular preschool teacher's role tends to be stimulatory.

## TEACHER EDUCATION

Rambusch (n.d) has written a withering criticism of Montessori teacher education. It is, she says, "based on an act of the heart, conversion, rather than an act of the mind, persuasion." (p 5). She claims that the training she received in 1954 has not changed today, and the author can verify this from visits to training institutions. Training consists of lectures on Montessori principles (see Appendix II for sample list of principles) and anecdotes of Montessori's life; dictation on the use of the Montessori materials; the manipulation of these materials in order to practise the sequence of presenting the materials to the child; observation in Montessori schools; teaching practice in Montessori schools. Rambusch said of her course, "The materials were not discussed in terms of the concepts they encapsulated. They were offered as quasi-magical mechanisms, through which children would prehend sensorially what others struggled to comprehend cognitively." (p 10).

The heart of the matter is this: Montessori teachers are inadequately trained by today's standard of teacher education. To begin with, they do not necessarily have a degree, whereas all elementary and secondary teachers in the USA must have, as a minimum, a four year degree. American teachers in some states may take an Education major and receive a teaching credential with only a little extra study; in some states a first degree may be followed by fairly extensive work towards a credential; or the first degree may be followed by a Master's degree in Education, and still further work may be needed for a teaching credential.

By contrast, the Montessori teacher may enter training straight from high school, following work experience with young children, or following an Associate Degree at a Junior or a Community College. In fact many Montessori trainees do hold a four-year degree when they begin Montessori training, but it is important to realize that they need not.

There are two principal types of training for Montessori teachers in America, and these are related to the organisation with which the training program is affiliated.

Affiliates of the Association Montessori Internationale (AMI) are approved by AMI at its Amsterdam (Netherlands) headquarters. There are five training sites in Europe (Italy, France, Germany, UK, Ireland), four in Asia (India, Pakistan, Sri Lanka, Japan), one in Canada, one in Mexico, and ten in the USA. Courses typically run from 9-11 months. The program of the Montessori Institute of Los Angeles is given below.

| | | |
|---|---|---|
| Semester 1 | Weeks 1 - 8 | Lectures |
| | Weeks 9 - 12 | Observations in schools |
| | Weeks 13 - 15 | Lectures |
| Semester 2 | Weeks 1 - 4 | Lectures and workshops |
| | Weeks 5 - 8 | Teaching practice |
| | Week 10 | Workshops |
| | Weeks 11 - 14 | Teaching practice |
| | Week 15 | Observations |

In summary, 17 weeks are spent in College, 13 weeks in schools.

All Montessori schools are private schools, and therefore teachers need not, and usually do not, have a State teaching credential.

Student fees are about US$2500 for the course. Materials are estimated to cost students $400-$500.

The content of the coursework is based on Montessori's work alone. Students are required to purchase only three texts: "The Absorbent Mind", "The Discovery of the Child" and "The Secret of Childhood", all by Maria Montessori. Courses usually studied in a regular teacher education program, such as child development, educational psychology, sociology, curriculum development, special education, multicultural education, are not taken. Piaget may or may not receive a mention in passing.

Teacher training establishments affiliated with the American Montessori Society (AMS) appear to be more varied in their programs. In a few cases training programs are offered through Community Colleges. Students would typically enter these Colleges straight from high school or as mature age students. However, the majority of training sites are established in conjunction with Montessori schools. A typical school-based training program is given below.

Summer Session - 4 weeks lectures on Montessori method

Autumn, Winter, Spring Sessions - school attachment, working as teacher's aide; occasional week-end seminars; two one-day visits to other Montessori schools; three inspections.

The author's general impression of Montessori teacher education in the USA is that it is largely an oral tradition; that methods have not changed over the last few decades, and that modern insights into child development are ignored. When Rambusch, (n.d.) herself a Montessorian, critically analysed the content of Montessori teacher education, she also proposed changes such as the use of videotapes of teachers presenting the didactic apparatus. She wrote, "Such tape once presented to students as a standard permits practice against it." (p 2-5). Such a statement reveals that in fact no change is really proposed, after all; the new medium is used to present the old message. She continued, "This tape is the perceptually accessible equivalent of the written Album which may be used to rehearse each of the steps in enactment with the material. The videotape seizes and holds the students' attention in a special way, since it frees them from the necessity of reading."

In addition to AMI and AMS affiliated programs, many schools train their own teachers. It was claimed that Montessori trained teachers receive higher pay than other preschool teachers. It seems difficult to believe; certainly preschool teachers are poorly paid in the USA, but then they frequently are untrained or under-trained, even though possessing a degree. The State of California, for example, has no early childhood teaching credential.

## THE PLACE OF THE MONTESSORI METHOD IN EARLY CHILDHOOD EDUCATION TODAY

In view of the limitations and inadequacies of the Montessori method of education, what is the present day early childhood educator to make of the Montessori "debate"?

If one returns to the writings of Maria Montessori, one is struck afresh with her intelligence, vision, wisdom, insight, and modernity. She was without any doubt a person ahead of her time, a remarkable innovator. She demonstrated that young children could learn academic and social skills, and more importantly that young disadvantaged children could do so equally well. Her system of education flourished during her life time, lapsed, and is now experiencing a mild revival. Phillips (1977) has charted the rise, fall, and rise again, of the acceptability of Montessori's viewpoint to psychologists and philosophers. Miezitis (1971) and McGrath (1980) have summarized empirical studies which have sought to demonstrate a relationship between Montessori education in the early years and achievement on such variables as cognitive ability, academic skills, and personal learning styles. Such few comparisons as do favour Montessori education do not constitute a compelling reason to favour Montessori education for all children.

Observations in Montessori classrooms in Sydney and Los Angeles, visits to Montessori teacher training sites, attendance at a day seminar on Montessori education, interviews with early childhood educators in the USA and reference to the writings of contemporary Montessori educators - all this has led the present writer to the conclusion that Montessori education, as practised today, is misguided in its attempt to keep alive a system of education that may have been effective and appropriate in the past, but which, being fossilized is rendered largely ineffective and inappropriate for the children of today.

Both educators and parents should be suspicious of a system that

1) ignores recent educational thinking, especially in regard to using a modern understanding of child development to inform educational practice;

2) trains its teachers in isolation from all other teachers

3) accepts a low standard of teacher preparation (as measured by level of intake, length of training, rigour of training, acceptability of credential)

4) conceptualizes teacher training as an exercise in learning to present the Montessori materials to children

5) defines education narrowly, paying scant attention to gross motor development, social skills, language and literature, creativity and the arts

6) uses a harsh outmoded system of discipline

7) limits parental involvement

## THE PERSISTENCE OF MONTESSORI SCHOOLS

It might fairly be asked, in the face of all these problems and inadequacies with Montessori education, why do Montessori schools persist?

1. Montessori education has strong overtones of a religion. Its adherents have an almost mystical belief in its efficacy, and preach eloquently on its behalf. Neither adherents nor converts are involved in questioning its basic assumptions and beliefs. A university mathematician whom the writer met at a Montessori preschool, developing a new piece of mathematical apparatus for use with children said "I know this system works...it's best for children." Yet upon questioning, he revealed that he knew no other system of early childhood education and had not as yet trialled his mathematical apparatus with the children in that school.

2. The parents who select a Montessori school for their child have usually no previous experience in selecting a school, and no standards of comparison. Parents, who are usually invited to pay a 30 minute observation visit to a classroom before enrolling their child, tend to be impressed by the orderliness of the environment and the eloquence of the teacher. The writer spoke to two prospective parents after one such observation visit. The husband, a psychiatrist, was impressed; the wife, a primary school teacher, was not.

3. Some parents are ambitious to give their children a good start in life, via education, and see the Puritan work ethic of present day Montessori schools as matching their beliefs in the value of hard work and strong discipline. A parent said to the writer, of her three year old son, "Well, they've got to learn to work hard in this world, and I'm pleased to find a school where they're made to work."

4. Some Montessori schools have kept their name, but branched out from the narrow curriculum of the orthodox Montessori school. They include sand and water play, gross motor activities, story telling, parental involvement in the classroom, and games and activities purchased from sources other than the Montessori educational suppliers. A teacher in one such school said "A morning in the sand box can be (the children's) work." When questioned as to what one would do with young children who put into their mouths small pieces of Montessori apparatus, a teacher replied, "Talk to them. Distinguish between what you eat and what you put in your mouth." The more usual Montessori reply would be, "Tell the child to put the material back on the shelf, as pieces must not be put in the mouth. Tell the child s/he will be able to use it again later when s/he is ready to use it properly." (Of course, a well educated early childhood teacher would discern a confusion in the first reply: the child may be mouthing the pieces in order to learn more about them - including whether they were edible or not).

5. Academics who take an interest in Montessori education are usually not trained and experienced early childhood educators, and approach Montessori education a) from a theoretical point of view and b) in ignorance of alternatives. An example of such an academic is Urban H Fleege, Ph D, Professor of Child Psychology and Early Learning, DePaul University. Fleege has developed a statement on the Montessori Method, "Twelve Points of the Montessori Method" (n.d) which is widely accepted and used by Montessori educators. Below the twelve points are reproduced, with a commentary from the modern preschool point of view from the present writer.

| Montessori Method | Comment |
|---|---|
| i) It is based on years of patient observation of child nature. | i) The patient observer was Maria Montessori, in her lifetime. Observers such as Fleege have made little impact upon current Montessori classroom practice. |
| ii) It has proved itself of universal application. Within a single generation, it has been tried with complete success with children of almost every nation. Race, colour, climate, nationality, social rank, type of civilization - all these make no difference to its successful application. | ii) The Montessori classroom reflects little of the culture of its pupils. This does not seem to be appropriate for the young citizens of the world today. |
| iii) It has revealed the child as a lover of work, intellectual work, spontaneously chosen and carried out with profound joy. | iii) Maria Montessori ably demonstrated this, and the knowledge is used by all modern early childhood educators. |
| iv) It is based on the child's imperious need to learn by doing. At each stage in the child's mental growth, corresponding occupations are provided by means of which he develops his faculties. | iv) Learning by doing is now totally accepted as a basis for planning young children's learning. The Chinese ("I do and I understand"), Montessori and Piaget all knew this. |
| v) While it offers the child a maximum of spontaneity, it nevertheless enables him to reach the same, or even a higher, level of scholastic attainment as under the old system. | v) The old system would seem to be a reference to what is provided for school-aged children. Scholastic attainment is not commonly a goal for preschool education. |
| vi) Though it does away with the necessity of coercion by means of rewards and punishments, it achieves an active discipline which originates within the child and it is not imposed from without. | vi) Rewards and punishments are not a feature of preschool education: in Montessori preschools, a great deal of discipline is observably imposed from without. |
| vii) It is based on profound respect for the child's personality and removes from him the preponderating influence of the adult, leaving him room to grow in biological independence. The child is allowed a large measure of liberty (not license) which forms the basis of real discipline. | vii) By removing the influence of the adult, the Montessori educator deprives the child of an important educational input. |

| Montessori Method | Comment |
|---|---|
| viii) It enables the teacher to deal with each child individually in each subject, and thus guide him according to his individual requirements. | viii) However, the amount of individual attention each child receives is limited to a less than daily contact. |
| ix) Each child works at his own pace. Hence, the quick child is not held back by the slow, nor is the latter, in trying to keep up with the former, obliged to flounder along hopelessly out of his depth. Each stone in the mental edifice is "well and truly laid" before the next is added. | ix) Again, a grade school model is being opposed, not a modern preschool. |
| x) It does away with the competitive spirit and its train of baneful results. More than this, at every turn it presents endless opportunities among the children for mutual help - which is joyfully given and gratefully received. | x) As above. |
| xi) Since the child works from his own free choice, without competition and coercion, he is freed from danger of overstrain, feelings of inferiority, and other experiences which are apt to be the unconscious cause of profound mental disturbances in later life. | xi) This could be a description of any modern preschool. |
| xii) Finally, the Montessori method develops the whole personality of the child, not merely his intellectual faculties but also his powers of deliberation, initiative, and independent choice with their emotional complements. By living as a free member of a real social community, the child is trained in those fundamental social qualities which form the basis of good citizenship. | xii) Montessori herself would have been able to make this claim, but practice in modern Montessori preschools belies these claims, since the curriculum is restricted in certain areas. Nowadays, this point describes a regular preschool more accurately than a Montessori preschool. |

6. Early childhood educators, by and large, have ignored Montessori education. When they have looked in to it they have noted

   . that many of the practices that are claimed to give especial distinction to Montessori school are fully incorporated into regular preschool programs;

   . that Montessori teachers are poorly prepared, as teachers, and have a limited understanding of child development;

. that the Montessori classroom environment is impoverished, rigid and rule-bound;

. that music, dance, drama, literature and poetry are neglected;

. that arts and crafts are taught prescriptively rather than creatively;

. that the role of the teacher in fostering language development and stimulating children's interests is not encouraged;

. that dramatic play, a tool for learning, is forbidden;

. that discipline is harsh and unsympathetic;

- but they have failed to say these things publicly; they have failed either to oppose or to accept Montessori education. This is understandable, since they believe that early childhood education has assimilated all that is best in the thinking of Montessori. But they have failed to inform the public of this fact also.

## MONTESSORI TEACHER EDUCATION IN AUSTRALIA

By now it should be clear that, in the opinion of this writer, there is no place for a traditional Montessori teacher education program in Australia. Australia, by international standards, is well provided with specific programs for preschool teachers, and can point with pride to a high standard in preschool teacher education.

Montessori teacher education, whether AMS or AMI affiliated, leans heavily on the writings of Maria Montessori and her present day exponents. The teacher educationmethod is largely in-bred and inward-looking, an oral tradition. There may be exceptions, but they are uncommon. To introduce Montessori teacher education would be to lower Australian standards for preparing the educators of young children.

The only level at which a study of the Montessori method might be contemplated is at the postgraduate level, for students who already hold an early childhood teaching qualification and who, in addition, have at least one year's experience in teaching young children. In this case, a study of the contribution of Maria Montessori and her followers, together with some practical experience in using Montessori materials with young children, would give experienced teachers the opportunity to judge for themselves the efficacy of the special Montessori apparatus, and to evaluate the particular teaching approach that she advocated. They would then, as classroom teachers, be in a position to use selectively the Montessori materials, and the Montessori teaching style. In addition, a skillful and experienced teacher would thus have an expanded repertoire of teaching techniques which s/he would employ according to her/his professional judgment.

As McGrath (1980) observed, in concluding her survey of recent research on the Montessori method, "Most of the research so far has proceeded on the assumption that a system is either a Montessori system or not. This denies the possibility that there can be hybrid systems, in which some of Dr Montessori's ideas can be integrated with more traditional practices. Indeed in Australia there are several classrooms practising this kind of integration. It is unfortunate that such integration is vehemently opposed by some fundamentalists who are advocates of the Montessori Method in a more 'pure' form and who tend to see themselves in some respects, as members of a closed freemasonary." (p 24).

REFERENCES

McGrath, H (1980) The Montessori Method of Education: an Overview of Research A J E C Vol 5 No 4

Miezitis, S (1971) The Montessori Method: Some Recent Research, Interchange, Vol 2 No 2

Montessori, M (1914) Dr Montessori's Own Handbook, NY: Stokes

Phillips, S (1971) Maria Montessori and Contemporary Cognitive Psychology, B J T Ed Vol 3 No 1

Rambusch, N McC (1962) Learning How to Learn, Baltimore: Helicon Press

———————— (n.d) Montessori Teacher Training: The Calypso Paradigm, The Constructive Triangle, NY: American Montessori Society

APPENDIX I

AMERICAN MONTESSORI SOCIETY - THE MONTESSORI METHOD

The basic idea in the Montessori philosophy of education is that every child carries unseen within him the man he will become. In order to develop his physical, intellectual and spiritual powers to the fullest, he must have freedom - a freedom to be achieved through order and self-discipline. The world of the child is full of sights and sounds which at first appear chaotic. From this chaos, the child must gradually create order, and learn to distinguish among the impressions that assail his senses, slowly but surely gaining mastery of himself and his environment.

Dr Maria Montessori developed what she called the "prepared environment" which already possesses a certain order and disposes the child to develop at his own speed, according to his own capacities, and in a noncompetitive atmosphere in his first school years. "Never let a child risk failure, until he has a reasonable chance of success," said Dr Montessori, understanding the necessity for the acquisition of a basic skill before its use in a competitive learning situation. The years between three and six are the years that a child most easily learns the ground rules of human behaviour. These years can be constructively devoted to "civilizing" the child - freeing him through the acquisition of good manners and habits, to take his place in his culture.

The child who has had the benefit of a Montessori environment is freer at a later age to devote himself more exclusively to the development of his intellectual faculties. The method by which children are taught in the Montessori school might well be called "programmed learning." The structure of Montessori learning involves the use of many materials with which the child may work individually. At every step of his learing, the teaching material is designed to test his understanding and to correct his errors.

Dr Montessori recognized that the only valid impulse to learning is the self-motivation of the child. Children move themselves toward learning. The teacher prepares the environment, programs the activity, functions as the reference person and examplar, offers the child stimulations; but it is the child who learns, who is motivated through the work itself (not solely by the teacher's personality) to persist in his chosen task. If the Montessori child is free to learn, it is because he has acquired from his exposure to both physical and mental order, an "inner discipline". This is the core of Dr Montessori's educational philosophy. Social adjustment, though it be a necessary condition for learning in a schoolroom, is not the purpose of education. Patterns of concentration, stick-to-itiveness, and thoroughness established in early childhood, produce a confident and competent learner in later years. Schools have existed historically to teach children to observe, to think, to judge. Montessori introduces children to the joy of learning at an early age and provides a framework in which intellectual and social discipline go hand in hand.

The American Montessori Society has emphasized the importance of Montessori insights for children and adults of all ages. Although children traditionally begin Montessori education at age three, the principles of self-motivated learning apply to all learning experiences. Modern learning research has confirmed the validity of the Montessori principles of programmed learning and the non-teacher (who does not distort or inhibit the learning experience). Many public, private and parochial elementary and secondary schools are now utilizing this approach.

APPENDIX II

SOME MONTESSORI PRINCIPLES

1. An effective relationship between a parent and child is possible only if an adult has a deep appreciation of the creative potential of a child and of his right to become independent and free.

2. The child must be respected and revered as a person (he is a miniature adult) he possesses within himself the person he will someday become.

3. Children go through critical (sensitive) learning periods in which they can learn more efficiently than before or after, hence the necessity of surrounding the children during these periods with appropriate learning experiences geared to his/her various readiness levels/psychological needs.

4. A carefully prepared environment is one of the most efficient and inherently appealing means of helping a child prepare for a life of learning.

5. The prepared environment combines an atmosphere of freedom with indirect discipline designed to develop a natural inner discipline and inner maturation in a child; opportunity for independent achievement leads to keen inner satisfaction, thus sharpening interests, expanding concentration, competence and self-confidence.

6. Recognition of individual differences including an individual rate of development calls for patience on the part of adults and refraining from comparing one child with another in the child's presence.

7. The nature of the environment, stimulating, stultifying, or indifferent, constitutes a powerful factor in determining the extent to which a child will reach his full potential.

8. Seonsory discriminative activities are important means of sharpening a child's observational and discriminative powers - essential in developing clear perceptions basic to the later attainment of clear concepts and ideas.

9. Meaningful learning tasks at a "creative moment" provide the most effective MOTIVATIONS for the child to develop himself.

10. The preschool years are the "absorptive" years in a child's life - when experiences and tasks geared to his developmental needs yield psychological outcomes which help shape his development for the rest of his life.

11. Inner discipline can be achieved in a carefully designed environment characterized by freedom within clearly set limits. Without these two prerequisites, inner discipline is almost impossible to achieve.

Appendix II continued

12. The young child learns through movement and through meaningful contact with physical reality; eg. while his fingers travel over the object, his mind mentally traverses the object, gradually formulating an image gathered via sensory impressions, enabling the child later to make correct judgments.

13. The thoroughly trained Montessorian has an open mind, realizing that continuous study of a child and of how he learns and develops will prompt ever new and creative approaches in introducing the child to a lifetime of creative learning.

14. Children respond eagerly to that which those whom they love and respect confidently, realistically and consistently expect of them.

15. The end-product of an effective child development program is a positive self-image which is portrayed by self-confidence.

Fleege, V B (1964) Standard Montessori Operating Procedures, 7th ed, Feb 1977, Chicago.

APPENDIX III

CODE OF ETHICS - AMERICAN MONTESSORI SOCIETY 1969 AND 1975

Principle I - Commitment to student

In fulfillment of the obligation to the child the educator -

1. Shall encourage independent action in the pursuit of learning.
2. Shall protect the opportunity to provide for participation in programs without regard to race, sex, colour, creed or national origin.
3. Shall protect the health and safety of students.
4. Shall honour professional commitments, maintain obligations and contracts while never soliciting nor involving students or their parents in schemes for commercial gain.

Principle II - Commitment to public

The Montessori educator shares in the responsibility for development of policy relating to the extension of educational opportunity for all and for interpreting educational programs and policies to the public.

1. Shall support his professional society and not misrepresent its policies in public discussion. Whenever speaking or writing about policies, the educator should take the precaution to distinguish his private views from the official position of the society.

Principle III - Commitment to the Profession

The Montessori educator makes efforts to raise professional standards and conditions to attract persons worthy of trust to careers in Montessori education.

In fulfilling these goals, the educator:

1. Shall extend just and equitable treatment to all members of the Montessori education profession.
2. Shall represent his own professional qualifications with clarity and true intent.
3. Shall apply for, accept, offer, recommend and assign professional positions and responsibilities on the basis of professional preparation and legal qualifications.
4. Shall use honest and effective methods of administering his duties, use of time and conducting business.

APPENDIX IV

MONTESSORI INSTITUTE OF LOS ANGELES INC

A DECALOGUE by DR MARIA MONTESSORI

1. Never touch the child unless invited by him (in some form or the other).

2. Never speak ill of the child in his presence or absence.

3. Concentrate on strengthening and helping the development of what is good in the child so that its presence may leave less and less space for evil.

4. Be active in preparing the environment. Take meticulous and constant care of it. Help the child establish constructive relations with it. Show the proper place where the means of development are kept and demonstrate their proper use.

5. Be ever ready to answer the call of the child who stands in need of you and ever listen and respond to the child who appeals to you.

6. Respect the child who makes a mistake and can then or later correct himself, but stop firmly and immediately any misuse of the environment and any action which endangers the child, his development or others.

7. Respect the child who takes rest or watches others working or ponders over what he himself has done or will do. Neither call him, nor force him to other forms of activity.

8. Help those who are in search of activity and cannot find it.

9. Be untiring in repeating presentations to the child who refused them earlier, in helping the child acquire what is not yet his own and overcome imperfections. Do this by animating the environment with care, with purposive restraint and silence, with mild words and loving presence. Make your ready presence felt to the child who searches and hide from the child who has found.

10. Ever treat the child with the best of good manners and offer him the best you have in yourself and at your disposal.

APPENDIX V

OBSERVATION GUIDELINES (The Hills Montessori Preschool Society, NSW)

Please respect the rights of the children. This is a place especially for them. Since you are their guest, we ask that you follow the following guidelines whilst observing the Montessori environment.

1. Observation hours are from 9.00 am to 10.30 am.
2. Observers are asked to sit quietly in the chair provided by the teachers. Please feel free to look more closely at the materials while the children are out of the room.
3. Please avoid eye-contact with the children.
4. If children talk to you, try not to engage them in conversation, but ask them to: "Please continue with your work."
5. If you are a husband and wife together, please do not talk with one another in the class. Children, especially your own, may think you are discussing them.
6. Any child's behaviour may be a reaction to your presence in the room. This is particularly true of your own child.
7. Please write your comments below so they can be shared during your parent-teacher conference.
8. Please do not speak to the Directoress or Assistants while the children are in the room. The Directoress will be pleased to discuss anything with you when the children go outdoors to play.

Thank you for your co-operation. We hope you enjoy your visit with us.

OBSERVATION GUIDELINES to parents and guests visiting Montessori of West Los Angeles, Inc

We appreciate your interest in coming to observe one of our classes and hope your visit will be a meaningful one.

To help you get the most out of your visit to our school, we have prepared the following guide to observations.

* We respectfully request that you remain at your place and refrain from talking with the teachers, children or other observers. If a child approaches you or talks to you, respond briefly but do not engage in any extended conversation or activity with him or her. After your observation our Director will be available to answer your questions.

- To visiting parents of currently enrolled students: While you are in the classroom your child may not behave as she or he usually does in the room. We therefore suggest that you first watch the group as a whole.
- Notice the social interaction of children in a multi-aged setting.
- Note the different lengths of time the children are involved in their work. Notice that different children have different abilities to concentrate and be absorbed in their work. Notice how some children, even when distracted, return easily to their work.

Appendix V continued

- Are some of the children working in small groups? Observe the level of interaction between and among the children.

- Notice the different types of activities in which the children are engaged.

- Notice how the teacher presents lessons. You will see that the individual reactions to the presentations are different. Generally, observe for individual differences of many kinds in the children relating to age, experience, motivation and interest, etc.

- Observe your child in relation to the above points.

APPENDIX VI

PROFILE OF A MONTESSORI SCHOOL

Montessori of West Los Angeles
1300 N Sepulveda Boulevarde
Postal address: P O Box 49325,
Los Angeles, Calif.90049.

Directress: Patti Britton

The school is a parent-owned corporation, run by a board of directors elected by parents and composed of parents and people from the community.

There are three classes of 3 - 6 year olds, one transition class, and one class each for grades 1 - 2, 3 - 4 and 5 - 6.

Placement in grade is determined by age, social-emotional maturity, and academic ability. Exceptional children are enrolled. Class size is 24 maximum. Each class has one teacher and one assistant. The standard of teacher education required is B A plus one year of Montessori training. The 5 - 6 grade teacher is not Montessori trained. She is highly esteemed.

The school offers free morning care 7.30 - 8.30 and paid afternoon care 2.30 - 6.00. There is a free "support program" one morning per week of athletics, language (Spanish or French) and "artistic activities" with visiting teachers. The school involves parents in private conferences twice yearly; open house evening early in school year; school picnic; Halloween carnival; book fair; assisting with cooking projects; on field trips; in managing the classroom libraries; and in scheduling the car pool.

To the observer, the classrooms for the 3 - 6 year olds look typically Montessorian, ie. not much material or equipment on the shelves. The general appearance of the school is rather run-down and dilapidated, though in an affluent neighbourhood. Parent satisfaction seems high. The "support program" and level of parental involvement are useful additions to a rather strict regime.

Jenny Simons

APPENDIX VII

MONTESSORI FOR TODDLERS

At the time of the 1980 Annual Conference of the National Association for the Education of Young Children in San Francisco, an all-day session was held on Montessori education. One section entitled "Montessori for toddlers? Why, and what they do" was of particular interest.

It was surprising to hear the goals for a Montessori toddler program enumerated, as they were not so different from any other toddler program:

To experience exposure to the outside world
To learn respect for objects and people
To learn to separate from parents
To learn to be independent

The method for achieving these goals, however, was to use Montessori (or other) materials to teach children principles of order, of completing each cycle. "Attitude and process are what you are teaching", so "structured or unstructured materials are equally useful." If children are not using the Montessori materials however, they may be "seduced" back into using them; alternatively the teacher may accept that the children do not need these materials just now and take some of them off the shelves.

The areas that were to be established in the infant-toddler room were

| | | |
|---|---|---|
| "Put and take" | Language | Outdoor materials |
| Music | Gradation | Library |
| Motor development | Snack bar | |

It is interesting to note that when Montessori principles are to be translated into use with a different age group that an understanding of child development begins to appear and the formulators of a new program seem, to themselves, to be breaking new ground.

Jenny Simons

APPENDIX VIII

ANNOTATED BIBLIOGRAPHY


Beyer, E (1962) Let's Look at Montessori in Montessori in Perspective (1966) Washington: National Association for the Education of Young Children.

Notes: Too narrow focus on a few specific concepts of size, shape, texture; limiting effect of didactic materials on creativity; lack of creative materials available to children; focus on ritual; lack of focus on children's feelings and emotions. It is interesting to observe that there is a complete lack of discussion of teacher education in the NAEYC document.

Farrow, E & Hill, C (1975) Montessori on a Limited Budget N Y:Valley Offset

Excellent ideas for activities for children, going far beyond the standard Montessori equipment, and a great deal of it resembling "ordinary" preschool activities and materials, especially in pre-reading.

Fleege, V B (1974) Montessori Index (2nd Ed) Ill: Montessori Publications, 1010 W Chicago Ave, Chicago, Illinois.

A useful index of every topic that Montessori treated in her many works. Fleege notes in the introduction that Maria Montessori wrote on the role of movement in learning, value of programmed learning with built-in control of error.

Gitter, L (1970) The Montessori Way Seattle: Special Child Publications

In chapter on Formation of Concepts gives clear, precise directions on introducing sensory materials to children. Does not discuss concept formation per se, but discusses sensory development - Montessorians don't see the difference and she (Gitter) dismisses language development as being unimportant.

Koche, M B (1973) The Montessori Manual of Cultural Subjects: A Guide for Teachers, Minn: Denison

Geography, history, science, botany, geology, art, music. Narrow approach; many old fashioned concepts of systematics in science are here enshrined.

Montessori, M (1912) Disciplining Children, McClure's Magazine, reprinted and slightly condensed in Montessori:Her Method and the Movement: What you need to know, ed Orem (1974) N Y Putnam

Montessori concludes "There are the first outlines of an experiment which shows a form of indirect discipline in which there is substituted for the critical and sermonizing teacher, a rational organisation of work and liberty for the child" (p 154). Orem, R C (1974) in Montessori: Her Method and the Movement: What you need to know ed R C Orem N Y:Putnam, Section IV (p 193-242) represents just about all that has been written on Montessori teacher training. The summaries of training programs are, by and large, lists of materials together with methods for introducing them. "Montessori" child development predominates heavily over modern child development, indicating that little modern child development theory is examined by teacher trainees. There is plenty of exhortation to observe, but little skill training along the lines of modern techniques in how to observe or what to use the observations for.

Montessori, M (1914) Dr Montessori's own Handbook, NY:Stokes

Her language exercises now seem extremely old fashioned; many were based on mathematical concepts - larger, smaller, thicker, thinner, etc. Maths. learning was based on concrete experience with materials. Some of Montessori's modern ideas:

- gymnastic apparatus should be used by children;
- children learn from one another;
- teacher should allow children to correct own errors;
- exercises are for development of discrimination, not for mastery per se.

Montessori, M (1964) The Montessori Method (American Edition) Cambridge, Mass: Bentley

The school day in a Montessori school lasted from nine to four, so the curriculum could include clay modelling, design, care of plants and animals, gymnastics, games (directed), religion, conversation period (children give an account of the events of the day before), music, singing, housekeeping (real), brick-making and building, potter's wheel (from age 5 or 6). Almost all of these activities have disappeared from the curriculum of the present day Montessori preschools, leaving them as pale shadows of her rich vision.

Montessori, Mario M Jr (1976) Education for Human Development NY:Schocken

Writing on "Montessori Education and Modern Psychology", Maria Montessori's son states "The School must be a cultural environment, so that children have the opportunity to become familiar with thebasic aspects of their own culture" (p 42). This dictum was certainly not followed in any of Montessori preschools visited by the author of this paper.

Plank, E M(1962) Reflections on the Revival of the Montessori Method in Montessori in Perspective (1966) Washington: National Association of the Education of Young Children

"I don't believe many schools for young children in the US will completely use Dr Montessori's method. New knowledge, new problems, demand new adaptations" p 47.

Rambusch, N McC (1962) Learning How to Learn: An American Approach to Montessori Baltimore: Helicon Press

- points out that "competence breeds confidence" and social adjustment follows upon competence. Rambusch states that Montessori's special contribution lay in these insights - child's rhythm of life
  - absorbent mind
  - liberty within limits
  - observation of the child
  - individualised instruction

Fantasy - Rambusch says children can't distinguish fact from fantasy - so exclude fantasy: "Montessori realized that the reality-bound school situation may prove more beneficial to the child in order to release his creative forces at a time when he is incapable of distinguishing fact from fantasy". She deals briefly with Montessori teacher education in the USA - confirms its didactic nature, the students being exposed to Montessori schools and teachers only, and with no attempt to synthesize current educational research or knowledge.

Appendix VIII continued

Schill, B (1962) Childhood Education in Montessori in Perspective (1966) Washington: National Association for the Education of Young Children

Schill summarizes what she considers to be Montessori's strengths and weaknesses:

+ "sensitive period" - cf "needs"
+ repetition
+ individual care and instruction
+ good apparatus
- overly strict rules for use of apparatus
- too little opportunity for children to manipulate and experiment
- lack of co-operation, teamwork, group problem-solving
+ reading and writing can begin early
+ real objects are used
- fantasy, role-playing, acting or improvisation are ruled out. Child prevented from becoming user of symbols.
+ non-competitive
+ prizes concentration and effort
+ the child comes to understand the structure in the environment

Ward, F E (1913) The Montessori Method and the American School, NY:Macmillan

Ward tabulates the similarities and differences between Montessori and kindergarten/primary education at that time. It is clear that the Montessori curriculum was more varied than is usual today - with more emphasis on outdoor and physical activity, music, modelling, drawing, construction and ethics (p 204-5). The chief differences she noted in the kindergarten curriculum were greater emphases upon "dramatic and representative games" and story telling, with less attention given to the language arts, mathematics and direct discussion of behaviour.

Jenny Simons

## APPENDIX IX

## PAPERS COLLECTED

Palm Beach Junior College, Florida: Montessori Teacher Education brochure

Montessori Institute of Los Angeles, California: Montessori Primary Training Course brochure

College of Notre Dame, Belmont, California: Montessori Diploma and M Ed (Specialization in Montessori) brochure

AMI Montessori Training Centers in Europe, America and Asia, 2 brochures: 1977, 1980

AMI brochures (2)

National Montessori Reporter, Vol 4, No 1, March 1980, published by National Center for Montessori Education

AMI Bulletin, Vol 17, No 1, 1979 "Piaget and Montessori in the Classroom" by David Elkind

Hills Montessori Society (NSW) - mimeo papers

Montessori of West Los Angeles, Inc - mimeo papers

Glenoaks Montessori Children's Center - mimeo papers

Nienhuis Montessori (educational suppliers) - 2 catalogues and price lists

### Film and tape brochures

Montessori, a way to grow - 32 mins. 16 mm, colour, Promethean Films $385

Montessori, an Education for Life - 25 mins, 16 mm. colour Arden Films 1980 $450

Maria Montessori: Follow the child - 52 mins, 16mm. colour. Distrib: Nienhuis Montessori USA $1,000

Montessori Audiocassettes (2) Promethean Films $10 each

APPENDIX X

## THANKS

My thanks to the following people for their assistance in my investigation of Montessori education.

Ms Pamela Shaw, NSW Montessori Association

Ms Jan Williams, NSW Montessori Association

Dr Shelley Phillips, University of NSW

Dr Joan Bergstrom, Wheelock College, Boston

Dr Millie Almy, Professor Emeritus, University of California, San Francisco

Ms Betsy Hiteshaw, Santa Monica Community College

Ms Pat Gardiner, Santa Monica Community College

Ms Estela Palmieri, Montessori Institute of Los Angeles

Ms Laurel Chadney, Directress, Glenoaks Montessori Children's Centre

Dr Phyllis Levitt, Director, First United Methodist Church of San Pedro Day Care Centre

Ms Bretta Weiss, National Director, American Montessori Society